

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

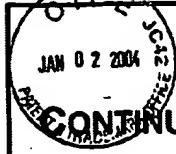
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REQUEST
FOR
CONTINUED EXAMINATION (RCE)
TRANSMITTAL**

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995.

See The American Inventors Protection Act of 1999 (AIPA).

Application Number	09/647,953
Filing Date	December 11, 2000
First Named Inventor	SEIJI MISHIMA
Group Art Unit	1762
Examiner Name	B.K. Talbot
Attorney Docket Number	03500.014385.

RECEIVED
C 1700
JAN 07 2004

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53(c) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50032 (Aug. 16, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. Submission required under 37 C.F.R. § 1.114

a. Previously submitted

i. Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on _____
(Any unentered amendment(s) referred to above will be entered).
ii. Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
iii. Other _____

b. Enclosed

i. Amendment/Reply
ii. Affidavit(s)/Declaration(s)
iii. Information Disclosure Statement (IDS)
iv. Other _____

2. Miscellaneous

a. Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(f) required)

b. Other _____

3. Fees

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

a. The Director is hereby authorized to charge any deficiencies in the following fees, or credit any overpayments, to Deposit Account No. 06-1205

i. RCE fee required under 37 C.F.R. § 1.17(e)
ii. Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
iii. Other _____

b. Check in the amount of \$ 770.00 (RCE fee) and \$ 110.00 (Extension of Time fee) is enclosed

c. Payment by credit card (Form PTO-2038 enclosed)

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	FRANK A. DELUCIA	Registration No. (Attorney/Agent)	42,476
Signature		Date	December 29, 2003

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on:

Name (Print/Type)	FRANK A. DELUCIA	Date	December 29, 2003
Signature			

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Director of the U.S.P.T.O., P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES and Completed Forms to the following address: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1/05/2004 NGUYEN 00000098 09647953

1 FC:1801 770.00 0P
2 FC:1251 110.00 0P

Adjustment date: 04/02/2004 SDIRETA1
01/21/2004 VAUGURB 00000007 061205 09647953
01 FC:1256 310.00 CR

Dep 2 Ref
#307

03500.014385

STATUS AND ENTITY
BRANCH

PATENT APPLICATION

2004 MAR 25 AM 9:30



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

SEIJI MISHIMA ET AL.

Application No.: 09/647,953

Filed: December 11, 2000

For: METHOD OF MANUFACTURING)
ELECTRONIC DEVICE,)
ELECTRONIC SOURCE AND)
IMAGE FORMING APPARATUS,)
AND DEVICE FOR)
MANUFACTURING THE)
ELECTRONIC DEVICE)

Examiner: B.K. Talbot

Group Art Unit: 1762

March 20, 2004

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR REFUND

Sir:

In connection with the above-identified application, Applicants request a refund of \$310.00 for a second month extension fee, which was erroneously charged to our Deposit Account 06-1205. It is requested that the refund be applied as a credit to that Deposit Account. The reason for the refund is explained below.

On December 29, 2003, Applicants submitted a Request For Continued Examination (RCE) and Amendment along with a check for \$110.00 for a one month

STATUS AND ENTITY
BRANCH

extension fee (see attached copies of the RCE, Amendment and a postcard acknowledging

204 MAR 25 AM 9:30

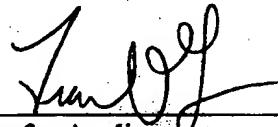
receipt of the documents and check). No additional extension fees were due at that time.

Applicants' attorneys received a Monthly Statement of Deposit Account, dated January, 2004, (copy attached) indicating that Deposit Account No. 06-1205 was charged \$310.00. It is respectfully submitted that this charge is not warranted.

Accordingly, Applicants hereby request a refund and authorizes the Commissioner to credit Deposit Account No. 06-1205 in the amount of \$310.00, to resolve this matter.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants

Registration No. 42476

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 414437v1

STATUS AND ENTITY
BRANCH

2004 MAR 25 AM 9:31



Mark Gray RCE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Kindly acknowledge receipt of the accompanying:

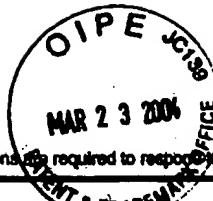
Specifications, claims and abstract _____ pages, with Transmittal Form P
 Patent Application Bibliographic Data Sheet _____ sheets
 Executed Oath or Declaration and Power of Attorney
 _____ Sheets of _____ formal, _____ informal drawings
 Check for \$ _____ (filing fee)
 Request for Continued Examination and Check for \$ 770.00
 Assignment, PTO-1595 and Check for \$ _____
 Transmittal Under 37 CFR 1.53(d) (CPA)
 Petition under 37 CFR 1.136 and check for \$ 110.00
 Other (specify) *Preliminary Amendment*

Date 12 129 03
Mo. Day Yr.
Att'y. Docket 014385.
09/647,953



by placing your receiving date stamp hereon and mailing or returning to deliverer.
This is a Continuation Divisional Continuation-In-Part
Atty. FAD/mw Due Date 12 129 03 37 CFR 1.8
37 CFR 1.10 By Hand

FC54-8



PTO/SB/30 (08-00)

Approved for use through 10/31/2002. OMB Control No. 1010-0490

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1985.

See The American Inventors Protection Act of 1999 (AIPA).

Application Number	09/647,953
Filing Date	December 11, 2000
First Named Inventor	SEIJI MISHIMA
Group Art Unit	1762
Examiner Name	B.K. Talbot
Attorney Docket Number	03500.014385.

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53(d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 18, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. Submission required under 37 C.F.R. § 1.114

a. Previously submitted

- Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on _____ (Any unentered amendment(s) referred to above will be entered).
- Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- Other _____

b. Enclosed

- Amendment/Reply
- Affidavit(s)/Declaration(s)
- Information Disclosure Statement (IDS)
- Other _____

2. Miscellaneous

a. Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(l) required)

b. Other _____

3. Fees

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

a. The Director is hereby authorized to charge any deficiencies in the following fees, or credit any overpayments, to Deposit Account No. 06-1205

- RCE fee required under 37 C.F.R. § 1.17(e)
- Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
- Other _____

b. Check in the amount of \$ \$770.00 (RCE fee) and \$110.00 (Extension of Time fee) is enclosed

c. Payment by credit card (Form PTO-2038 enclosed)

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	FRANK A. DeLUCIA	Registration No. (Attorney/Agent)	42,476
Signature		Date	December 29, 2003

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on:			
Name (Print/Type)	FRANK A. DeLUCIA	Date	December 29, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Director of the U.S.P.T.O., P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES and Completed Forms to the following address: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

+



STATUS AND ENTITY
BRANCH

2004 MAR 25 AM 9:31

In re Application of: Docket No. 03500.014385

SEIJI MISHIMA ET AL.

Application No.: 09/647,953

Examiner: B.K. Talbot

Filed: December 11, 2000

Group Art Unit: 1762

For: METHOD OF MANUFACTURING ELECTRONIC
DEVICE, ELECTRONIC SOURCE AND IMAGE
FORMING APPARATUS, AND DEVICE FOR
MANUFACTURING THE ELECTRONIC DEVICE

Date: December 29, 2003

THE COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is an Amendment in the above-identified application.

No additional fee is required.

The fee has been calculated as shown below

CLAIMS AS AMENDED						
	(2) CLAIMS REMAINING AFTER AMENDMENT		(4) HIGHEST NO. PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	RATE	ADDITIONAL FEE
TOTAL CLAIMS	* 26	MINUS	** 208	0	x \$9 \$18	0
INDEP. CLAIMS	* 4	MINUS	*** 18	0	x \$43 \$86	0
Fee for Multiple Dependent claims \$145°/\$290						0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT--						0

* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

STATUS AND ENTITY
BRANCH

Verified Statement claiming small entity status is enclosed, if not filed previously. 204 MAR 25 AM 9:31

A check in the amount of \$_____ is enclosed.

Charge \$_____ to Deposit Account No. 06-1205. A duplicate copy of this sheet is enclosed.

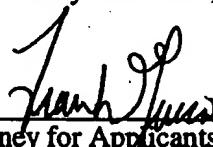
Any prior general authorization to charge an issue fee under 37 C.F.R. 1.18 to Deposit Account No. 06-1205 is hereby revoked. The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. 1.16 and 1.17 which may be required during the entire pendency of this application, or to credit any overpayment, to Deposit Account No. 06-1205. A duplicate copy of this paper is enclosed.

A check in the amount of \$_____ to cover the fee for a _____ month extension is enclosed.

A check in the amount of \$_____ to cover the Information Disclosure Statement fee is enclosed.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



Hank J. Juras

Attorney for Applicants

42476

Registration No. _____

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200

NY_MAIN 397731v1

03500.014385.



STATUS AND ENTITY
PATENT APPLICATION
BRANCH

204 MAR 25 AM 9:31

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
SEIJI MISHIMA ET AL.)
U.S. Appln No.: 09/647,953)
Filed: December 11, 2000)
For: METHOD OF MANUFACTURING)
ELECTRONIC DEVICE,)
ELECTRONIC SOURCE AND)
IMAGE FORMING APPARATUS,)
AND DEVICE FOR MANUFACTUR-)
ING THE ELECTRONIC DEVICE : December 29, 2003

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

A Request for Continued Examination is being filed herewith. Preliminary to continued examination, please amend the above-identified application as follows: the claims changes are reflected in the listing beginning at page 2, and the Remarks begin at page 11.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 29, 2003.

(Date of Deposit)

FRANK A. DeLUCIA (REG. #42,476)

(Name of Attorney for Applicant)

Signature

December 29, 2003

(Date of Signature)

IN THE CLAIMS

2011 MAR 25 AM 9:31
The following is a complete listing of the claims, and replaces all earlier
versions and listings.

1. (Currently Amended) A method of manufacturing an electronic
device, comprising the steps of:

moving, relative to each other, a droplet ejecting portion of an ink jet device
and a substrate, to which [[a]] droplets are [[is]] to be ejected, relatively in an in-surface
direction along a droplet-receiving surface of said the substrate, and detecting a distance
between said the ejecting portion and [[a]] the droplet-receiving given surface on said of
the substrate; and

ejecting toward a plurality of portions separated mutually on the substrate at
plural times at a predetermined time interval intermittently the droplets of a liquid
containing material for forming the electronic device, wherein the predetermined time
interval is controlled based on a result of the detecting upon the moving under a control of
the distance based on a detection result.

2. (Cancelled)

3. (Currently Amended) A method of manufacturing an electronic
device as claimed in claim 1, wherein the detecting of the distance includes a step of

measuring the distances between said the ejecting portion and predetermined the plurality of portions separated mutually on the substrate.

4. (Currently Amended) A method of manufacturing an electronic device as claimed in claim, 1 wherein the detecting of the distance includes a step of measuring a distance between said the ejecting portion and one or some of predetermined the plurality of portions separated mutually on the substrate.

5. (Currently Amended) A method of manufacturing an electronic device as claimed in claim 1, wherein the detecting of the distance includes a step of measuring a distance between said the ejecting portion and one or some of predetermined the plurality of portions separated mutually on the substrate, and a step of calculating the distances between said the ejecting portion and others of predetermined the plurality of portions separated mutually on the substrate, based on the result of the measuring.

6. (Cancelled)

7. (Currently Amended) A method of manufacturing an electronic device, comprising the steps of:

moving, relative to each other, a droplet ejecting portion of an ink jet device and a substrate, to which [[a]] droplets are [[is]] to be ejected, relatively in an in-surface

direction along a droplet-receiving surface of said the substrate, and while detecting a

distance between said the ejection portion and [[a]] the droplet-receiving given surface on
said of the substrate; and

2004 MAR 25 AM 9:31

ejecting toward a plurality of portions separated mutually on the substrate at plural times intermittently at a predetermined time interval the droplets of a liquid containing material for forming the electronic device, wherein the predetermined time interval is controlled based on upon the moving, a timing of the ejecting varied according to a result of the detecting.

8.-17. (Cancelled)

18. (Currently Amended) A method of manufacturing an electronic device as claimed in claim 1, wherein said the ink jet device is of a system of giving a type that imparts thermal energy to the liquid to produce a bubble, [[to]] thereby to eject the a droplet.

19. (Currently Amended) A method of manufacturing an electronic device as claimed in claim 1, wherein said the ink jet device is of a system of ejecting type that ejects the droplets by means of a piezo-electric element.

204 MAR 25 AM 9:31

20. (Currently Amended) A method of manufacturing an electron

source having a plurality of electron emission elements electron-emitting devices,

comprising the steps of:

moving, relative to each other, a droplet ejecting portion of an ink jet device and a substrate, to which [[a]] droplets are [[is]] to be ejected, relatively in an in-surface direction along a droplet-receiving surface of said the substrate, and;

detecting a distance between said the ejecting portion and [[a]] the droplet-receiving given surface on said of the substrate; and

ejecting to a plurality of portions separated mutually on the substrate at plural times intermittently at a predetermined time interval the droplets of a liquid containing material for forming a conductive member of the electron-emitting device, wherein the predetermined time interval is determined based on a result of the detecting upon the moving under controlling the distance based on a detection result.

21. (Cancelled)

22. (Currently Amended) A method of manufacturing an electron source as claimed in claim 20, wherein the detecting of the distance includes a step of measuring the distances between said the ejecting portion and predetermined and the plurality of portions separated mutually on the substrate.

2004 MAR 25 AM 9:

23. (Currently Amended) A method of manufacturing an electron source as claimed in claim 20, wherein the detecting of the distance includes a step of measuring a distance between said the ejecting portion and one or some of predetermined the plurality of portions separated mutually on the substrate.

24. (Currently Amended) A method of manufacturing an electron source as claimed in claim 20, wherein the detecting of the distance includes a step of measuring a distance between said the ejecting portion and one or some of predetermined plurality of portions separated mutually on the substrate, and a step of calculating the distances between said the ejecting portion and others of the predetermined plurality of portions separated mutually on the substrate, based on a result of the measuring.

25. (Cancelled)

26. (Currently Amended) A method of manufacturing an electron source having a plurality of electron-emitting devices, comprising the steps of: moving, relative to each other, a droplet ejection portion on an ink jet device and a substrate, to which [[a]] droplets are [[is]] to be ejected, relatively in an in-surface direction along a droplet-receiving surface of said the substrate, and while detecting a distance between said the ejecting portion and [[a]] the droplet-receiving given surface on said of the substrate; and

ejecting to a plurality of portions separated mutually on the substrate at plural times intermittently at a predetermined time interval the droplets of a liquid containing material for forming the electronic electron-emitting device upon the moving, a timing of the ejecting varied according to wherein the predetermined interval is controlled based on a result of the detecting.

27. - 70. (Cancelled)

71. (Currently Amended) A method of manufacturing an electron source as claimed in claim 20, wherein said the ink jet device is of a system of giving a type that imparts thermal energy to the liquid to produce a bubble, [[to]] thereby to eject the a droplet.

72. (Currently Amended) A method of manufacturing an electron source as claimed in claim 20, wherein said the ink jet device is of a system of ejecting type that ejects the droplets by means of a piezo-electric element.

73. (Currently Amended) A method of manufacturing an image forming apparatus having an electron source and an image forming member onto which electrons are irradiated from said the electron source, characterized in that said wherein the electron source is one that has been manufactured by a method as claimed in claim 20.

74. - 94. (Cancelled)

204 MAR 25 AM 9:31

95. (Currently Amended) A method of manufacturing an electronic device as claimed in claim 7, wherein said the ink jet device ejects the liquid droplet by applying thermal energy to the liquid to generate a bubble in the liquid.

96. (Currently Amended) A method of manufacturing an electronic device as claimed in claim 7, wherein said the ink jet device ejects the liquid droplet by means of a piezo-electric element.

97. (Currently Amended) A method of manufacturing an electron source as claimed in claim 26, wherein said the ink jet device ejects the liquid droplets by applying thermal energy to the liquid to generate a bubble in the liquid.

98. (Currently Amended) A method of manufacturing an electron source as claimed in claim 26, wherein said the ink jet device ejects the liquid droplets by means of a piezo-electric element.

99. (New) A method of manufacturing an electronic device as claimed in claim 7, wherein the detecting of the distance includes a step of measuring the distance

STATUS AND ENTITY
BRANCH

between the ejecting portion and the plurality of portions separated mutually on the
substrate.

204 MAR 25 AM 9:32

100. (New) A method of manufacturing an electronic device as claimed
in claim 7, wherein the detecting of the distance includes a step of measuring a distance
between the ejecting portion and one or some of the plurality of portions separated
mutually on the substrate.

101. (New) A method of manufacturing an electronic device as claimed
in claim 7, wherein the detecting of the distance includes a step of measuring a distance
between the ejecting portion and one or some of the plurality of portions separated
mutually on the substrate, and a step of calculating the distances between the ejecting
portion and the others of the plurality of portions separated mutually on the substrate, based
on the result of the measuring.

102. (New) A method of manufacturing an electron source as claimed in
claim 26, wherein the detecting of the distance includes a step of measuring the distances
between the ejecting portion and the plurality of portions separated mutually on the
substrate.

103. (New) A method of manufacturing an electron source as claimed in

STATUS AND ENCL
BRANCH

claim 26, wherein the detecting of the distance includes a step of measuring a distance 2014 MAR 25 AM 9:3
between the ejecting portion and one or some of the plurality of portions separated
mutually on the substrate.

104. (New) A method of manufacturing an electron source as claimed in

claim 26, wherein the detecting of the distance includes a step of measuring a distance
between the ejecting portion and one or some of the plurality of portions separated
mutually on the substrate, and a step of calculating the distances between the ejecting
portion and the others of the plurality of portions separated mutually on the substrate, based
on the result of the measuring.

105. (New) A method of manufacturing an image forming apparatus

having an electron source and an image forming member onto which electrons are
irradiated from the electron source, wherein the electron source is manufactured by a
method as claimed in claim 26.

REMARKS

This application has been reviewed in light of the Office Action dated 2004 MAR 25 AM 9:32 August 29, 2003. Claims 1, 3-5, 7, 18-20, 22-24, 26, 71-73 and 95-105 are presented for examination. Claims 6, 8, 25, 27, 44, 45, 52 and 53 have been cancelled, without prejudice or disclaimer of subject matter, and will not be mentioned further. Claims 1, 3-5, 7, 18-20, 22-24, 26, 71-73 and 95-98 have been amended to define more clearly what Applicants regard as their invention. Claims 99-105 have been added to provide Applicants with a more complete scope of protection. Claims 1, 7, 20, and 26 are in independent form. Favorable reconsideration is requested.

Claims 1, 3-5, 7, 18-20, 22-26, 71-73 and 95-98 were rejected under 35 U.S.C. § 103(a) as being unpatentable over either JP 10-58668A, JP 11-25852A, U.S. Patent 6,060,113 (Banno et al.) or EPA 736890 (Kobayashi et al.), in combination with JP 10-5654A or JP 06-163449A.

Independent Claim 1 is directed to a method of manufacturing an electronic device. The method comprises moving a droplet ejecting portion of an ink jet device and a substrate, to which droplets are to be ejected, relative to each other, in a direction along a droplet-receiving surface of the substrate, and detecting a distance between the ejecting portion and the droplet-receiving surface of the substrate. The method also includes ejecting toward a plurality of portions separated mutually on the substrate at plural times, and at a predetermined time interval, the droplets, which are of a liquid containing material

for forming the electronic device. According to Claim 1, the predetermined time interval is
controlled based on a result of the detecting.

204 MAR 25 AM 9:32

As has been explained previously, an object of the present invention is to solve the problem posed by variations in the position on a substrate onto which liquid droplets are ejected using an ink jet liquid ejection system (this technique is often used in the manufacture of various types of semiconductor circuitry, and great precision in the placement of the droplets is of high importance). The method of Claim 1 enables the position to be corrected in a manner that avoids the problems of the prior art.

The prior art relied upon in the Office Action has been discussed in detail previously, and it is not believed to be necessary to repeat that discussion in full detail. The Office Action states that the four primary references each fail to disclose measuring the distance between the ejecting portion and the substrate, as recited in Claim 1, and relies upon the two secondary references for that feature.

In the systems of JP10-5654 and JP 06-163499, a distance between a substrate and a nozzle is varied and controlled. However, neither of these documents discloses or suggests that a droplet ejecting portion of an ink jet device and a substrate to which droplets are to be ejected are moved relative to each other, the liquid droplets are ejected toward the substrate a plurality times at a predetermined time interval, and controlling the time interval based on a result of detecting a distance between the ejecting portion and the substrate, as is done in the method recited in Claim 1.

STATUS AND ENTITY
BRANCH

For at least that reason, Claim 1 is believed to be clearly allowable over the proposed combinations of the prior art (assuming for argument's sake that those combinations would be permissible). 204 MAR 25 AM 9:32

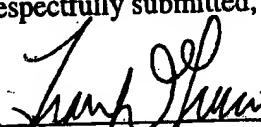
Independent Claims 7, 20, and 26 each recite features that are similar in relevant respects to the recitation of Claim 1 discussed above, and also are believed clearly patentable over those references, for substantially the same reasons as is Claim 1.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Frank J. Dunn

Attorney for Applicants

42,476

Registration No. _____

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 392507V1



United States
Patent and
Trademark Office

STATUS AND ENTITY
BRANCH

204 MAR 25 AM 9:32



Deposit Account Statement

Requested Statement Month: January 2004
Deposit Account Number: 061205
Name: FITZPATRICK CELLA HARPER & SCINTO
Attention:
Address: 30 ROCKEFELLER PLAZA
City: NEW YORK
State: NY
Zip: 10112-3801

DATE SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
01/02 2	09986914	1263.1607	1806	\$180.00	\$49,909.00
01/05 35	10745605	03500.017837	1202	\$6.00	\$49,903.00
01/05 40	29192006	02105002490 - APFORCE 8007		\$1,200.00	\$48,703.00
01/05 43	29189679	02105002480 - APFORCE 8007		\$1,200.00	\$47,503.00
01/06 1	09532076	35.C14367	1253	\$930.00	\$46,573.00
01/06 1	60509046	00005.001217.2	1005	\$160.00	\$46,413.00
01/06 2	60509046	"	1052	\$50.00	\$46,363.00
01/07 10	10642232	03500.014437.1	1051	\$130.00	\$46,233.00
01/07 28	76076965	1915T106A	6004	\$150.00	\$46,083.00
01/07 168	10748208	03500.013552.1	9204	-\$86.00	\$46,169.00
01/07 650	78348618	1790.820	7001	\$335.00	\$45,834.00
01/07 688	78348641	1790.830	7001	\$335.00	\$45,499.00
01/07 695	78348645	1790.840	7001	\$335.00	\$45,164.00
01/07 707	78348652	1790.850	7001	\$335.00	\$44,829.00
01/08 1	10472148	00005.001223.	1615	\$126.00	\$44,703.00
01/08 5	10363145	00766.000070	9204	-\$168.00	\$44,871.00
01/08 40	09863424	1263.1605	1806	\$180.00	\$44,691.00
01/08 41	09863424	1263.1605	1201	\$344.00	\$44,347.00
01/08 42	09863424	1263.1605	1202	\$126.00	\$44,221.00
01/08 43	09863424	1263.1605	1252	\$420.00	\$43,801.00
01/08 56	09984437	35.C15901	1203	\$290.00	\$43,511.00
01/08 95	6623759	02244001900	8010	\$25.00	\$43,486.00
01/08 96	6623759	02244001900	8008	\$200.00	\$43,286.00
01/08 101	09523684	1807.1092	1252	\$420.00	\$42,866.00
01/08 145	09385430	862.2988	1806	\$180.00	\$42,686.00
01/08 197	09392742	862.3022	1501	\$1,330.00	\$41,356.00
01/08 198	09392742	862.3022	8001	\$15.00	\$41,341.00
01/08 199	09385430	862.2988	1501	\$1,330.00	\$40,011.00

Deposit Account Statement

Page 2 of 4

		STATUS AND ENTITY			
		BRANCH	8001		
01/08 200	09385430	862.2988		\$15.00	\$39,996.00
01/08 377	10157847	03500.016460	1504	\$300.00	\$39,696.00
01/08 378	10157847	03500.016460	1504 MAR 25 AM 150132	\$1,330.00	\$38,366.00
01/08 379	10157847	03500.016460	8001	\$15.00	\$38,351.00
01/08 380	09009251	35G2110	1501	\$1,330.00	\$37,021.00
01/08 381	09009251	35G2110	8001	\$15.00	\$37,006.00
01/09 35	09264721	35.C13379	1501	\$1,330.00	\$35,676.00
01/09 36	09264721	35.C13379	1504	\$300.00	\$35,376.00
01/09 37	09264721	35.C13379	8001	\$15.00	\$35,361.00
01/09 43	08767018	35.G1845	1504	-\$300.00	\$35,661.00
01/09 57	29192839	21052500JPFORCE	8007	\$580.00	\$35,081.00
01/09 58	29194914	21052444JPFORCE	8007	\$620.00	\$34,461.00
01/09 66	10751716	03530.000004	9204	-\$162.00	\$34,623.00
01/09 88	10173608	03500.016488	1201	\$6.00	\$34,617.00
01/09 110	09497079	NOT IN DFTB SYSTEM	8008	\$200.00	\$34,417.00
01/09 111	09497079		8009	\$440.00	\$33,977.00
01/09 112	09497079	↓	8024	\$120.00	\$33,857.00
01/09 113	09922815	NOT IN DFTB SYSTEM	8008	\$200.00	\$33,657.00
01/09 114	09199569	↓	8008	\$200.00	\$33,457.00
01/09 194	10265264	03500.012649	1201	\$4.00	\$33,453.00
01/09 240	10482839	01702.402900	1616	\$40.00	\$33,413.00
01/12 1	10247997	01573.001100	2253	\$475.00	\$32,938.00
01/12 1	Z1230251	02783.0000T2.WP	6901	\$100.00	\$32,838.00
01/12 133	0133970485	02521000212	8014	\$50.00	\$32,788.00
01/12 139	0140670390	02521000213	8014	\$50.00	\$32,738.00
01/12 193	09506289	35.C14384	8001	\$15.00	\$32,723.00
01/12 227	09554794	839.425	1202	\$2,430.00	\$30,293.00
01/13 20	10412681	0210.002365	1202	\$40.00	\$30,253.00
01/13 26	09838809	02105001093	8013	\$25.00	\$30,228.00
01/13 27	09838809	02105001093	8013	\$25.00	\$30,203.00
01/13 28	09838809	02105001093	8013	\$25.00	\$30,178.00
01/13 29	09838809	02105001093	8013	\$25.00	\$30,153.00
01/13 34	09974634	00050097000	8013	\$25.00	\$30,128.00
01/13 89	0140670390	02521000212C0	8014	\$25.00	\$30,103.00
01/13 90	0133970485	02521000212C0	8014	\$25.00	\$30,078.00
01/13 94	29194914	02105.002444	8023	\$120.00	\$29,958.00
01/13 97	0000012236	NOT IN DFTB SYSTEM	8014	\$25.00	\$29,933.00
01/13 98	29192006	02105002490 - APFORCE	8023	\$120.00	\$29,813.00
01/13 100	29192839	02105.002500 JPFORCE	8023	\$120.00	\$29,693.00
01/13 166	09973185	00364006100	8013	\$25.00	\$29,668.00
01/14 1	10270142	00684.003425	1203	\$290.00	\$29,378.00
01/14 1	09940642	35.C15728	1201	\$86.00	\$29,292.00
01/14 1	10028668	684.3305	1203	\$280.00	\$29,012.00
01/14 4	09465387	862-3179	1251	\$110.00	\$28,902.00
01/14 297	10470680	02139.000037	1617	\$130.00	\$28,772.00
01/15 1	10091465	03500.016263	1202	\$18.00	\$28,754.00
01/15 2	PCT/US03/36090	00050.106200. P.C.	9204	-\$104.00	\$28,858.00
01/15 2	10236935	03500.011325	1251	\$110.00	\$28,748.00

Deposit Account Statement

Page 3 of 4

01/15 2	10091465	03500.016263	1203	\$280.00	\$28,468.00
01/15 3	PCT/US03/36090	NI-3890	1703	\$12.00	\$28,456.00
01/15 105	09838809	02105001093	8013	\$25.00	\$28,431.00
01/15 106	09838809	02105001093	8013	\$25.00	\$28,406.00
01/15 107	09838809	02105001093	8013	\$25.00	\$28,381.00
01/15 108	09838809	02105001093	8013	\$25.00	\$28,356.00
01/15 109	09838809	02105001093	8013	\$25.00	\$28,331.00
01/15 165	09838809	02105001093	8013	\$25.00	\$28,306.00
01/16 174	0133500188	02521000213MX	8014	\$50.00	\$28,256.00
01/20 3	P108453	NOT IN SYSTEM	1460	\$130.00	\$28,126.00
01/20 29	29187789	02105.002475	8021	\$40.00	\$28,086.00
01/20 30	29187679	02105.002480	8021	\$40.00	\$28,046.00
01/20 31	0133500188	02521000212	8014	\$200.00	\$27,846.00
01/20 52	10683102	03500.014604.1	9204	-\$610.00	\$28,456.00
01/21 1	10219242	03500.016628	1203	\$204.00	\$28,252.00
01/21 5	60509039	00766.000068.9V	1005	\$160.00	\$28,092.00
01/21 6	60509039	" "	1052	\$50.00	\$28,042.00
01/21 7	09847953	35.C14385	1252	\$310.00	\$27,732.00
01/21 54	09708586	862.C2045	1251	\$110.00	\$27,622.00
01/22 67	5045552	03175000100ESPEIER	8010	\$25.00	\$27,597.00
01/22 68	5045552	03175000100ESPEIER	8008	\$200.00	\$27,397.00
01/22 70	5708013	03175000100ESPEIER	8010	\$25.00	\$27,372.00
01/22 71	5708013	03175000100ESPEIER	8008	\$200.00	\$27,172.00
01/23 1	09960283	684.3256	1801	\$770.00	\$26,402.00
01/23 1	09500027	35.C14232	1202	-\$216.00	\$26,618.00
01/23 1	09459479	862.3161	2201	\$473.00	\$26,145.00
01/23 3	75209811	945.9017	6001	\$670.00	\$25,475.00
01/23 9	PCT/US03/41331	00966.000068.9C	9204	-\$2,135.00	\$27,610.00
01/23 10	76268094	867226	6004	\$150.00	\$27,460.00
01/23 59	6608621	03500.015049	1811	\$100.00	\$27,360.00
01/23 145	0142520835	NOT IN SYSTEM	8014	\$25.00	\$27,335.00
01/23 146	0142520835	" "	8023	\$120.00	\$27,215.00
01/23 147	0142550321	" "	8014	\$25.00	\$27,190.00
01/23 148	0142550324	" "	8014	\$25.00	\$27,165.00
01/23 159	09465450	36J.P205	1801	\$20.00	\$27,145.00
01/23 295	78355783	01781.00T199.US	7001	\$335.00	\$26,810.00
01/23 346	78355818	1266.10614	7001	\$335.00	\$26,475.00
01/26 114	10761279	03500.013494.2	1202	\$344.00	\$26,131.00
01/26 116	10761279	03500.013494.2	1201	\$172.00	\$25,959.00
01/26 117	10761279	03500.013494.2	1203	\$290.00	\$25,669.00
01/26 265	0142550321	02105.002442	8014	\$125.00	\$25,544.00
01/26 269	0142550324	02105.002442	8014	\$175.00	\$25,369.00
01/26 271	0142520835	02105.002441	8014	\$175.00	\$25,194.00
01/26 272	0141650418	02105.002441	8014	\$175.00	\$25,019.00
01/27 6	0133500188	02521000213ZA	8014	\$50.00	\$24,969.00
01/28 178	78358103	00945010617	7001	\$335.00	\$24,634.00
01/28 940	78358515	00945010615	7001	\$335.00	\$24,299.00
01/28 1006	78358552	01628.603700	7001	\$335.00	\$23,964.00

STATUS AND ENTITY
BRANCH
M 9/32
W 25
TUE 25

		STATUS AND ENTITY	BRANCH	AMOUNT	END BALANCE
01/28	1201 78358658	03076.000001	7001	\$335.00	\$23,629.00
01/28	1221 78358676	03076.000002	7001	\$335.00	\$23,294.00
01/28	1256 78358695	00947010616	7003	\$1,005.00	\$22,289.00
01/29	4 10412681	0210.002365	1202	-\$40.00	\$22,329.00
01/29	8 09838809	02105001093	8013	-\$25.00	\$22,354.00
01/29	24 10684384	NOT IN SYSTEM	9204	-\$290.00	\$22,644.00
01/29	62 10763214	03630.000178.1	1202	\$18.00	\$22,626.00
01/29	98 10763231	03500.017853.	1201	\$86.00	\$22,540.00
01/29	176 0142660146	02105.002442	8014	\$75.00	\$22,465.00
01/29	178 0142660193	02105.002441	8014	\$175.00	\$22,290.00
01/30	1 76357138	946.10208	6001	\$670.00	\$21,620.00
01/30	2 09955137	35.C15809	1202	\$36.00	\$21,584.00
01/30	4 09408447	862.3050	1251	\$110.00	\$21,474.00
01/30	6 10669333	00684.003531	9204	-\$375.00	\$21,849.00
01/30	316 10129626	01263.001662	8007	\$20.00	\$21,829.00
01/30	1003 78359941	00224000367	7001	\$335.00	\$21,494.00

START BALANCE	SUM OF CHARGES	SUM OF REPLENISHMENTS	END BALANCE
\$50,089.00	\$33,106.00		\$4,511.00
			\$21,494.00

[Need Help?](#) | [Return to USPTO Home Page](#) | [Return to Office of Finance Home Page](#)